


## Standard Operating Procedures for Dimethyl Sulfoxide (DMSO)

#1 Process (if applicable)	<p>DMSO is used as a solvent to dissolve aphicicolin and DAPT.</p> <p>It is received as a solution. Working solutions range from 0.01-10%. Volumes are typically under 1 ml.</p> <p>Drug is delivered slowly to inner ear fluids using an osmotic pump (400 µl @ 1-10%) or is added to cultured tissues (0.01-10%).</p>
#2 Chemicals and Hazards	<p>DMSO is a clear liquid. Slightly hazardous if inhaled or if in contact with skin or eyes. May be toxic to blood, kidneys, liver, mucous membranes, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage.</p> <p>It is also combustible and should be stored in a flammable hood.</p>
#3 Personal Protective Equipment (PPE)	<p>Gloves, labcoat and goggles are worn when handling this reagent. Solutions are used in a hood. If skin/eye exposure occurs, wash with water for 15 min. If inhaled, move to fresh air.</p>
#4 Environmental/ Ventilation Controls	<p>Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only with adequate ventilation or respiratory protection</p>
#5 Special Handling Procedures & Storage Requirements	<p>Avoid inhalation of vapor or mist. Keep away from sources of ignition</p> <p>No smoking.</p> <p>Take measures to prevent the build up of electrostatic charge.</p> <p>Keep container tightly closed in a dry and well-ventilated place.</p> <p>Store under inert gas. Hygroscopic</p>
#6 Spill and Accident Procedures	<p>If the spill is minor and does not pose a threat to personnel, contact EH&amp;S at 206.543.0467 during normal business hours (Monday – Friday, 8 AM – 5 PM) for spill cleanup assistance (dial 911 if spill occurs after hours and assistance is needed).</p> <p><b>Small Spill:</b></p> <p>Evacuate the spill area. If possible, confine the spill to a small area using a spill kit or absorbent material. Keep others from entering contaminated area (e.g., use caution tape, barriers, etc.). Absorb with an inert dry material and place double bag as dry waste. Finish cleaning with soap and water and wipe up with paper towels. Double bag dry waste and label with online waste tag. Arrange chemical waste pick-up.</p> <p><b>Large Spill:</b></p> <p>Evacuate the spill area. If possible, confine the spill to a small area using a spill kit or absorbent material. Keep others from entering contaminated area (e.g., use caution tape, barriers, etc.). Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk.</p> <p>Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Double bag dry waste and label waste tag.</p> <p>For spill cleanup assistance (dial 911 if spill occurs after hours and assistance is needed).</p> <p><b>Chemical Spill on Body or Clothes –</b></p>

	<p>If spill on skin is small, wash with large amount of water and soap. If large volume is spilled remove clothing and rinse body thoroughly in emergency shower for at least 15 minutes. Seek medical attention if necessary.</p> <p>Notify supervisor and EH&amp;S immediately.</p> <p><b>Chemical Splash Into Eyes</b>  – Immediately rinse eyeball and inner surface of eyelid with water from the emergency eyewash station for 15 minutes by forcibly holding the eye open. Seek medical attention if necessary. Notify supervisor and EH&amp;S immediately.</p>	
#7 Waste Disposal	<p>All acutely toxic chemical waste must be collected for proper waste disposal by EH&amp;S (sink disposal is not permitted). Store hazardous waste in closed containers that are properly labeled, and in a designated area (flammable cabinet is recommended). No toxic materials are permitted to be poured down the drain. Complete a Chemical Waste Collection Request Form to arrange for disposal by EH&amp;S; detailed instructions are provided at the following link:  <a href="http://www.ehs.washington.edu/epowaste/chemwaste.shtm">http://www.ehs.washington.edu/epowaste/chemwaste.shtm</a>.</p>	
#8 Special Precautions for Animal Use (if applicable)	<p>Animals exposed to the agent are discarded in the normal manner.</p>	
Particularly hazardous substance involved?	<input type="checkbox"/> YES:	Blocks #9 to #11 are Mandatory
	<input type="checkbox"/> NO:	Blocks #9 to #11 are Optional.
#9 Approval Required		
#10 Decontamination		
#11 Designated Area		
Name: Dr.s Edwin W Rubel and Jennifer Stone	Title: Professors	
Signature: 	Date: 02/17/2022	